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ABSTRACT

The Toledo Public Schools and the Toledo Diocesan Schools have both been involved in the implementation of competency-based instructional systems in the past three years. Each system has achieved implementation in varying degrees and by contrasting methodologies. The objectives of this paper are to (1) examine the theoretical framework, the social contexts, the staffing constraints, the inservicing, the implementation phases, and the feedback mechanisms of these two programs; (2) analyze these components as to their similarity and dissimilarity, noting particularly their degree of functionality; and (3) synthesize generalizations potentially applicable to the implementation of any competency-based instructional system. (Author)

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Purpose

In the past four years both the Toledo Public Schools and the Toledo Catholic Diocesan Schools have implemented competency based instructional systems in the schools. Whereas both programs have reached actual implementation by use of the basic components of competency based instruction, each has achieved implementation in varying degrees and by contrasting methodologies.

The objectives of this symposium are three dimensional: (1) to examine the theoretical frameworks, the social contexts, the staffing constraints, the inservicing, the implementation phases, and the feedback mechanisms operating in these programs; (2) to analyze these components as to their similarity and dissimilarity, noting particularly their degree of functionality; (3) to synthesize a series of generalizations potentially applicable to the implementation of competency based instructional systems.

Issues and Problems In Implementing Competency Based Instructional Systems

In developing and implementing any competency based curriculum, there are several contextual considerations which must be made. These involve assessments of the social environment, the student profile, school resources, and the values of the school community. Once this general needs assessment

has been accomplished, we then proceed to the business of curriculum building itself; determination of goals and objectives, identification of assessment procedures, development of instructional strategies, selection of instructional resources, and the development of information feedback mechanisms for monitoring evaluation functions. The curriculum building process develops modules, the basic organizing unit of a competency based education system.

Competency based instructional systems as vehicles of change encounter both traditional and new kinds of resistance. Because competency based programs often follow change dictated by state or local legislation, such programs are sometimes perceived as being dictated from above and without. Teachers and administrators often fo[illegible] changes because they appear to limit the educator's self-determination and are perceived as watchdog techniques. Additionally, considerable criticism has been leveled at competency based education as dehumanizing the educational process. Such criticism appears to overlook several critical factors: first, the prime role of individualized instruction in a competency based curriculum, and second, the necessary involvement of the total school community (parents, students, teachers, et al) in the determination of educational goals.

Deve'opment and Implementation of the Competency Based Model in the Toledo Schools

The model inherent in the Toledo Public Schools Educational Planning Project was developed between 1970-72 and consists of a structured planning cycle with five components: needs assessment, instruction by objectives. budget decentralization, information-dissemination, and evaluation. A primary s timulus for the implementation model came from the Ohio's legislature mandating increased systematic educational planning at the district level.

Schools may elect to undertake all or part of the change model based upon their unique needs. Some buildings have begun with a comprehensive needs assessment procedure to determine priorities for change, while others elected to start with a focus on a particular curriculum discipline or with decentralized budget control. The planning model is intended to provide the data necessary for rational decision-making decentralized to the building level. A data bank including student and school profiles, along with responses from the total educational community on education issues will provide individual schools with a means to prioritize their educational needs.

Presently, the central thrust of the Toledo competency based program involves the instruction by objectives component. The pilot implementation of this component occurred in the Spring of 1973 in eight Toledo elementary schools perceived by project personnel as being conclusive to change. In selecting pilot schools, project personnel first met with the administrators to learn of their willingness to cooperate. Next, the particular curricular needs of the school were discussed (in Reading and Math). At this point, project personnel presented an outline of the competency based education sequence to the staff and asked for volunteer participants. A prototype curriculum in one of the disciplines was presented to the staff as a starting point; teacher input was solicited to modify the prototype to: a) suit the needs of the building, and b) increase the generalizability of the materials.

Teachers volunteering for the project received a paid, ten-hour inservice program on writing and categorizing objectives, criterion-referenced testing, and individualizing strategies. Following the pilot implementation in the schools, 23 teachers were solicited to develop a complete set of competency based curriculum materials for Reading and Math. These teachers were drawn

from the original program schools and from those schools which were to participate in the expanded program (at least one from each school). During the Summer of 1973, these teachers, along with Educational Planning staff and curriculum consultants, developed competency based curriculum materials which include measurable behavioral objectives, criterion referenced test items, a record keeping chart, and alternative materials keyed to each objective.

Implementation schools for the 1973-74 school year were selected on the basis of administrator and teacher predisposition (following conferences with principals and staffs), and reflect a variety with respect to both staffing organization and curriculum materials used. Questionnaire feedback from 61 of the 109 participating teachers indicated that a majority of the respondents in both the Reading and Math programs believed that the materials helped their efforts in individualizing, identifying the entry level of students, and developing skills to enable the student to work more on his own. Teachers expressed a need for greater demonstrations of more specific examples of how to use the materials with particular kinds of students.

The Toledo Diocesan Schools: Implementing a Large Scale Program

In contrast to the Toledo Public Schools, the Diocesan Schools of Toledo implemented a competency based program because of internal pressures and without the aid of outside funding. The thrust for curriculum change in the Diocese came initially from church and school officials who perceived a degree of curriculum stagnation. The competency based model was introduced during the 1970-71 school year with the help of a team of University of Toledo Faculty. An inservice curriculum class was conducted for diocesan personnel, helping them master the tenets of competency-based instruction.

Throughout the 1971-72 school year, the Diocesan School consultants and

University of Toledo faculty conducted curriculum meetings for teachers and administrators. Curriculum guidelines in the areas of art, guidance, language arts, mathematics, music, science, and social studies developed modules for field testing. During the 1972-73 field testing, intensive inservice training and evaluation of the curriculum guidelines were furnished by the consultants for the field test teachers, while a less intensive program was conducted for other schools.

The 1973-74 competency based program of the Diocese presently involves ninety-six elementary schools in northwest Ohio, involving school populations varying from affluent suburban, rural farm and non-farm, central city working class to inner-city poor. Over 1000 teachers and over 12,000 teachers are involved to some degree in the use of competency based instructional materials.

The school's willingness to use the curriculum materials was more closely related to the Principal's attitude towards innovation than it was to the geographic location, size or social class nature of the schools. The teacher's willingness to use a competency based model for teaching did not relate to age or experience, but was positively related to their degree of use of previous instructional innovations.

The total reassessment of all of the curriculum guides is now taking place and most will have completed this process by the end of the school year. Eight Diocesan schools and eight elementary schools outside the Diocese have been evaluating the Guidance curriculum guidelines with respect to the following dimensions: (1) evaluation of curriculum guidelines by teachers; (2) evaluation of change of teacher behavior by teachers; (3) evaluation of student behavior change by teachers (with experimental and control groups); (4) evaluation of the program by students. Feedback from classroom teachers indicated greater satisfaction with the guidelines than with previous materials; it also indicated

that the greater single need is generating a feedback system to manage an orderly curriculum change process. Inservicing is perceived as a necessary vehicle to learn the skills necessary for this task. In research involving 64 teachers and 320 students using Guidance objectives, students in competency based instructional groups showed significantly greater gains in social behavior than did students not in such classes.

Staffing Implications for Competency Based Instructional Programs

Since the Toledo Public Schools and the Diocesan Scools have used a variety of staff organizations, including both self-contained and multi-unit classrooms, the introduction of competency based education stimulated two central questions. First, does a competency based system necessitate a multi-unit staff organization to function effectively? And conversely, does a multi-unit staffing arrangement need a competency based format to focus and coordinate its operation?

The individualized instruction necessary in a competency based system strongly suggests the need for a variety of student group configurations. These groupings additionally suggest the need for a variety of teaching skills to meet varied student learning needs. Diversified staffing is thus necessary if the individualized character of competency based education is to be realized. Competency based education in a self-contained format will tend to be limited as to bredth and depth. Preliminary feedback from teachers indicates that the amount of possible individualization is positively related to the degree of diversified staffing.

A multi-unit staffing organization is functionally dependent upon a competency based system to a lesser degree. The preclusion of a competency based approach from the multi-unit school, however, tends to limit the general

clarity of purpose, the specification of skills, and the effectiveness of any evaluation monitoring system. In either case, feedback from teachers supports the suggestion that any innovation involving competency based education and/or multi-unit staffing will be perceived as threatening by many educators, and is best initiated in a climate of administrator and teacher voluntarism.

Educational Implications

Analysis of these presentations yields a number of common characteristics. The Toledo Public and the Diocesan programs were carried out in an overlapping geographical area and involved elementary school children from a wide spectrum of home backgrounds. Both initially involved volunteer participants who were inserviced and built their own competency based curriculum. Packaged curriculum materials were treated as resources rather than as materials ready for implementation. Each inservice program built in rewards for teachers involvement, whether it be release time, extra pay, or graduate credit for workshop participation. Both systems have gathered data relative to the effectiveness and/or perceived effectiveness of their programs.

By contrast certain elements in the two programs are marked by their dissimilarities. One program was initially stimulated by the church and educational hierarchy, the other by state legislative direction. The Diocesan program has been a more widescale change involving large numbers of teachers in all curriculum areas; the Toledo program has concentrated in two areas and involved a relatively small number of teachers. The Toledo program is operating in the context of a global educational planning model; the Diocesan change model is confined to the more basic curriculum components. Whereas, the Toledo program has functioned in a climate of teacher organization pressures, the Diocesan program has been relatively free of such pressures.

A synthesis of these findings yields a number of generalizations potentially applicable to the implementation of any competency based system. (1) Such innovations tend to be accepted best in a climate of administrator and teacher voluntarism. (2) Degree of implementation in schools is related to principal predisposition, and degree of teacher implementation is related to the amount of previous teacher curriculum innovation. (3) Participation is enhanced when competency based education is correctly perceived as a system for organizing and evaluating curriculum procedures and not as a method of teaching. (4) Participation is promoted additionally by some form of reward for inservice participation. (5) The necessary teacher inservicing process should require teachers to build their own curriculum modules, thus creating a psychological investment for teacher implementation. (6) Implementation utilizing diversified staffing tends to promote a greater degree of individualizing for students. (7) Evaluation is the most difficult component of the model to operationalize; yet it will be the most important in effecting change, because it furnishes data pertaining to the relevance of objectives and the effectiveness of instructional strategies.